



AQUATO[®]
STABI-KOM

Fully Biological Wastewater
Treatment for New Construction
and Retrofitting



Although most households are connected to the sewage system, in rural areas this connection is often not possible and therefore your own responsibility as a landowner is required. The wastewater must be removed in such a way that the valuable groundwater is not endangered.

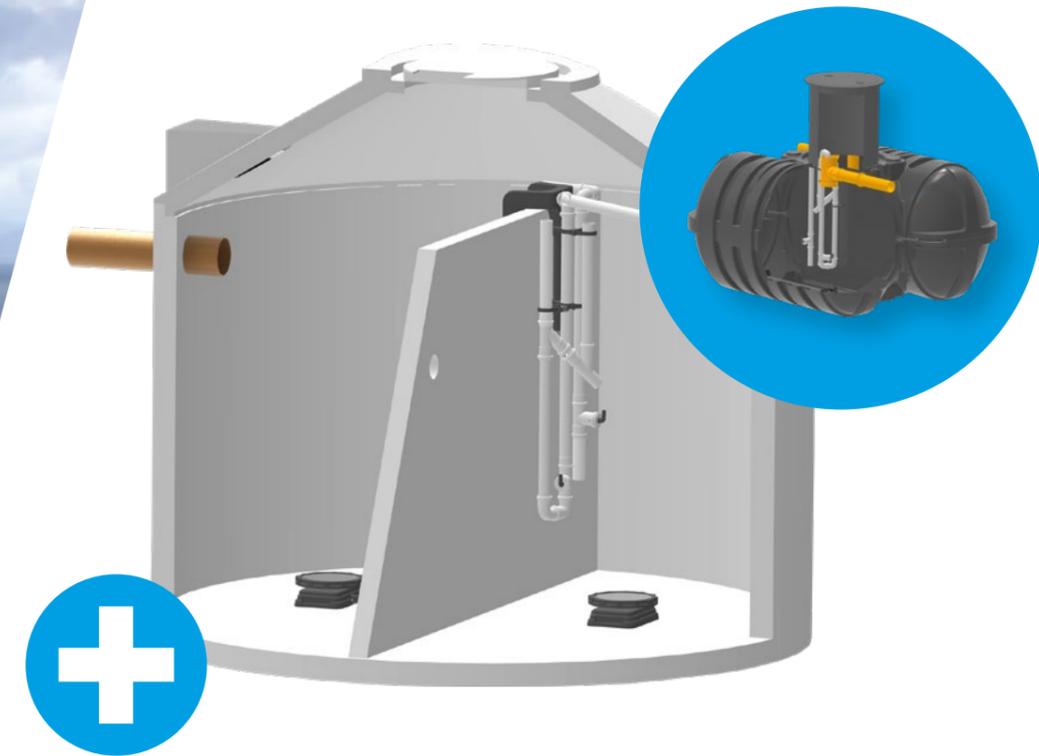
AQUATO® helps you with a small sewage treatment plant of the latest generation!

AQUATO® STABI-KOM

The new generation among the small sewage plants!

AQUATO® has succeeded in what has been tried for a long time – the wastewater treatment plant almost without sludge removal – approved by DIBt, with outstanding cleaning performance.

Over the years test plants under various conditions have proven STABI-KOM works "without fuss or quibble".



ADVANTAGES

- + No odour nuisance
- + No fouling processes
- + Long sludge removal interval
- + Prevents corrosion in concrete tanks
- + Significantly reduced operational costs

AQUATO® STABI-KOM & STABI-KOM-PAKT

Simply brilliant with maximum Efficiency up to 50 PE!

3-PHASES-CYCLE SSB®

Single Stage Activated Sludge System after SSB® Process

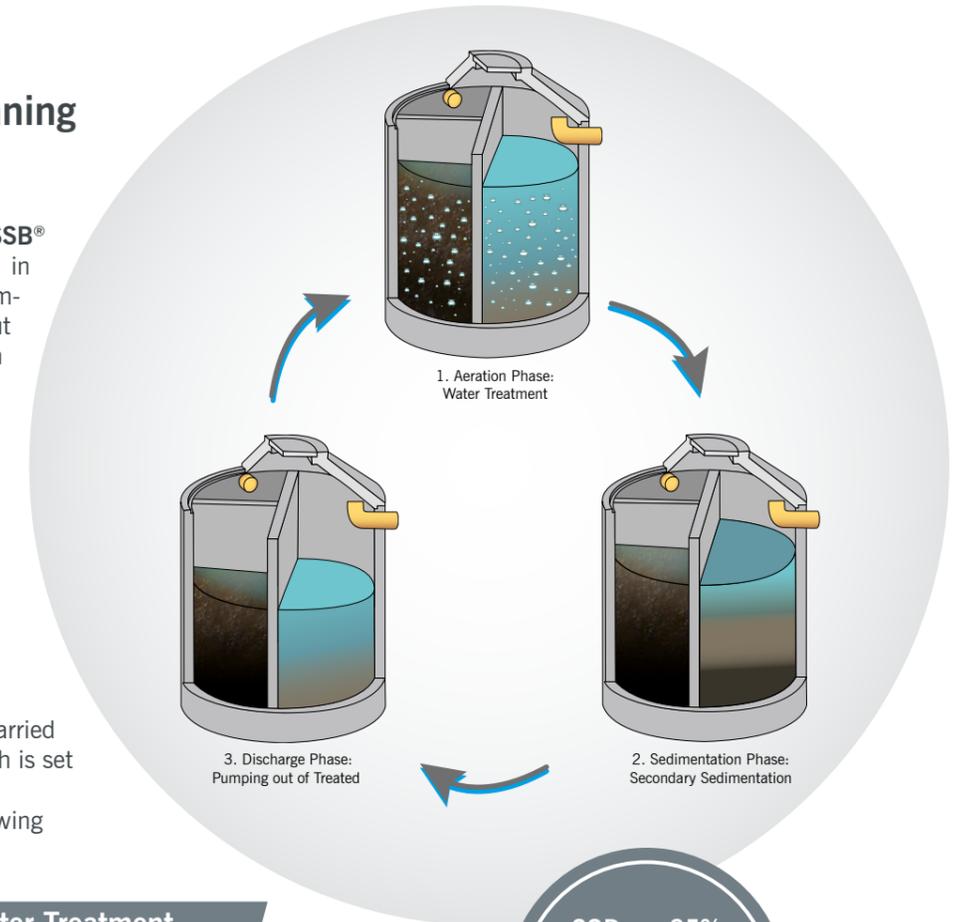
The **AQUATO® STABI-KOM** is a single stage activated sludge plant according to the SSB®-process (sequential stabilizing activated sludge process – a sequential aerobic wastewater treatment plant with integrated sludge stabilization), developed by AQUATO® Umwelttechnologien GmbH.

Generally, both the cyclic wastewater treatment by sequencing batch process, as well as the separation of sludge, sludge stabilization and sludge storage are carried out in one joint stage.

Here, the individual processes are not physically separated but in time (intermittent operation). The common stage is divided into at least two chambers. Additional to the function as primary settlement, the first chamber is also used for aeration. The last chamber is used for the intermittent oxygen input as well as secondary clarification.

Outstanding Cleaning Performances

These three phases of the **SSB® process** can be operated in modern single- or multi-chamber tanks or easily, without major structural changes, in existing older tanks.



All steps in the plant are carried out on a regular cycle, which is set by the control panel. A cycle consists of the following phases:

1. Aeration Phase: Water Treatment

The incoming sewage initially reaches the first chamber. Here the biological treatment of the wastewater starts. Organic compounds are removed by microorganisms in the activated sludge. Optionally, the process of denitrification takes place here. In addition, coarse material is retained in the first chamber.

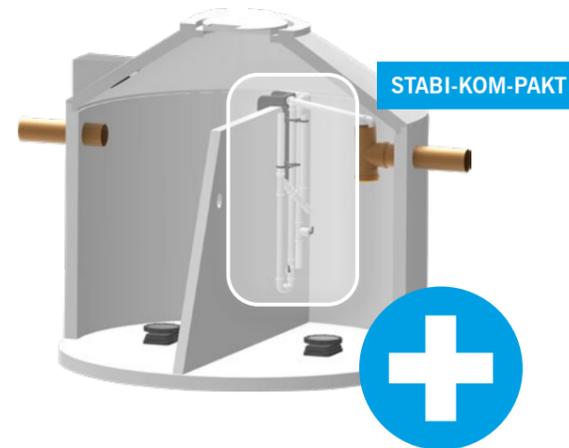
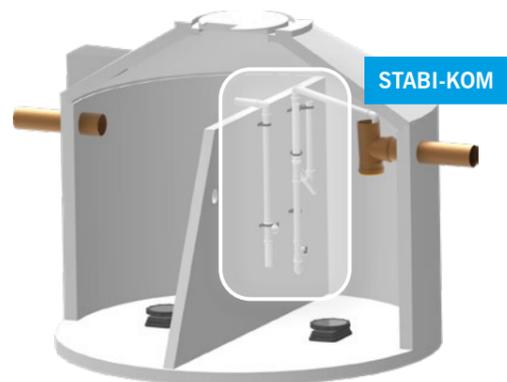
2. Sedimentations Phase: Secondary Clarification

Biological treatment of the wastewater also takes place in the last chamber. In the same chamber but separated by time final sedimentation takes place. The activated sludge settles down to the ground of the aeration tank and the cleared water separates in the upper part of the tank.

3. Discharge Phase: Pumping out of Treated Water

The clearwater is pumped out of the tank through the outlet.

COD:95%
BOD₅:99%
SS:96%
NH₄-N: ..98%
N_{tot,anorg}: ..77%



STABI-KOM

or

STABI-KOM-PAKT

ADVANTAGES

- + Reduced technology - thus less susceptible
- + No electrical components submerged in water
- + High level of operational safety due to modern technology
- + Longevity due to proven units
- + Simple and safe assembly and retrofitting
- + Low maintenance costs due to easy handling
- + Low power consumption
- + Economy mode optional
- + Excellent discharge values even with over- & underload

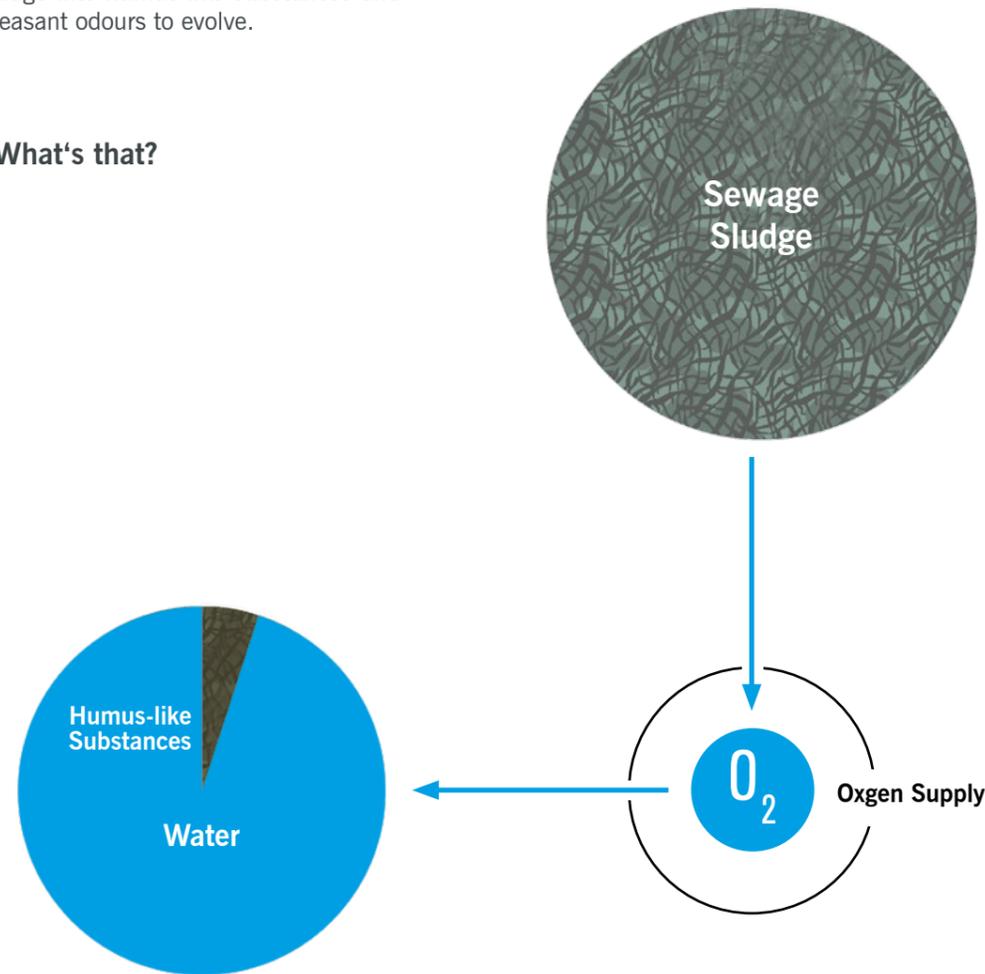
AQUATO® STABI-KOM - THE ORIGINAL Sludge Formation and Sludge Stabilisation

Sludge Formation and Sludge Stabilization

As it is characteristic to the SSB process, only aerobically stabilized sludge forms in the small wastewater treatment plant **AQUATO®STABI-KOM**.

The system is designed to combine the treatment of the wastewater and a sludge stabilization by sufficient aeration. The sludge needs no further treatment. Normally sewage sludge consists of min. 95% water, with solid and dissolved substances. This „muddy brew“ creates unpleasant odors by sludge decomposition. By the supply of oxygen fouling processes does not occur. Instead microorganisms are formed, which convert the sludge into humus-like substances and do not allow the unpleasant odours to evolve.

Sludge disposal? What's that?



With sufficient tank size and simultaneous aerobic sludge stabilization a sludge balance turns out in the **AQUATO® STABI-KOM** wastewater treatment plant over the years. Sludge disposal could possibly be omitted completely. This will save you a tremendous amount of money for years!

AQUATO® CONTROL UNIT K-PILOT



Control Unit K-Pilot 18.1 & 18.3

State-of-the-art computer control **K-Pilot 18.1** and **18.3** with a large graphic display. It provides all important data at a glance. To minimise maintenance efforts, there is an integrated backpressure monitoring system. Standard equipment is the K-Pilot 18.1. For larger systems or special functions, the K-Pilot 18.3 with extended functionality is used. In this control there is for example the possibility to connect a clear water pump, whereby even larger delivery heights can be bridged.



Wall Cabinet

External cabinet solution to accommodate the control unit and the compressor. The casing consists of fibre-glass reinforced plastic (GPR) and includes a built-in power socket.



ADVANTAGES

- + Modern control for smooth operation
- + 6 line graphic display
- + Safe and easy handling
- + Compact construction due to integrated rotary valves with stepper technology
- + Instead of airlifters, submerged pumps can be connected
- + Compact modular construction: Optionally with wall bracket, or in wall- and outdoor cabinet

Rotary Valve

Integrated rotary valve with step motor technology- energy saving and quiet.



Outdoor Cabinet

External cabinet solution to accommodate the control unit and the compressor. Not only cost-effective but also a reliable protection from the elements. The casing consists of fibre-glass reinforced plastic (GFK) or PE and includes a built-in power socket.

AQUATO® STABI-KOM Small Wastewater Treatment Plant

INGENIOUS!

... meets all legal requirements and standards, not only for Germany but for the entire EU region! The effluent quality must meet the high requirements - therefore the DIBt, the German Institute for Building Technology in Berlin, checks the status of our technology. The **AQUATO®STABI-KOM** plant is approved.

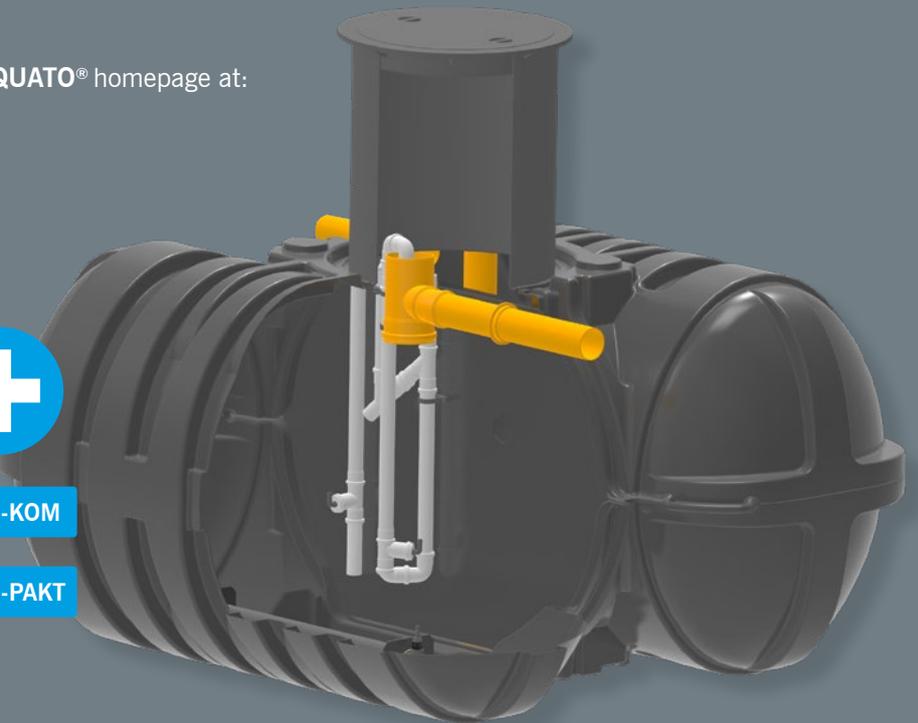
The **AQUATO®STABI-KOM** small wastewater treatment plant as retrofitting and as new construction in tanks made of concrete, PE, PP and GRP has received multiple DIBt approvals.

The current approvals can be found on the **AQUATO®** homepage at:
www.aquato.de/en/download/zulassungen/



STABI-KOM

STABI-KOM-PAKT



Presented by:



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